08mar03 15:29:01 User208600 Session D1563.1

SYSTEM:OS - DIALOG OneSearch File 155:MEDLINE(R) 1966-2003/Mar W1 (c) format only 2003 The Dialog Corp.
File 5:Biosis Previews(R) 1969-2003/Mar W1 (c) 2003 BIOSIS

Set	Items	Description
S1	214	(MU OR M) (W) CONOTOXIN
S2	148	RD (unique items)
S3	2279	STRIATUS
S4	1	S2 AND S3
S5	5449	CONOTOXIN
S6	19	S3 AND S5
S7	19	ID (sorted in duplicate order)
S8	0	(S3.2)
S9	3	S3(W)2 OR S32
S10	89	'S3(W)2' OR 'S32'
S11	0	S5 AND S10

/7/1 (Item 1 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv.
10345420 BIOSIS NO.: 199698800338
Scorpion toxins affecting sodium current inactivation bind to distinct homologous receptor sites on rat brain and insect sodium channels.
AUTHOR: Gordon Dalia(a); Martin-Eauclaire Marie-France; Cestele Sandrine; Kopeyan Charles; Carlier Edmond; Khalifa Rym Ben; Pelhate Marcel; Rochat Herve
AUTHOR ADDRESS: (a)Lab. Biochem., CNRS URA 1455, Jean Roche Inst., Bd. Pierre Dramard, 13916 Marseille Cedex 20**France
JOURNAL: Journal of Biological Chemistry 271 (14):p8034-8045 1996 ISSN: 0021-9258 DOCUMENT TYPE: Article
RECORD TYPE: Abstract LANGUAGE: English
ABSTRACT: Sodium channels possess receptor sites for many neurotoxins, of which several groups were shown to inhibit sodium current inactivation. Receptor sites that bind alpha- and alpha-like scorpion toxins are of particular interest since neurotoxin binding at these extracellular regions can affect the inactivation process at intramembranal segments of the channel. We examined, for the first time, the interaction of different scorpion neurotoxins, all affecting sodium current inactivation and toxic to mammals, with alpha-scorpion toxin receptor sites on both mammalian and insect sodium channels. As specific probes for rat and insect sodium channels, we used the radiolabeled alpha-scorpion toxins AaH II and Lqh-alpha-IT, the most active alpha-toxins on mammals and insect, respectively. We demonstrate that the different scorpion toxins may be classified to several groups, according to their in vivo and in vitro activity on mammalian and insect sodium channels. Analysis of competitive binding interaction reveal that each group may occupy a distinct receptor site on sodium channels. The alpha-mammal scorpion toxins, and the anti-insect Lqh-alpha-IT bind to homologous but not identical receptor sites on both rat brain and insect sodium channels. Sea anemone toxin ATX II, previously considered to share receptor site 3 with alpha-scorpion toxins, is suggested to bind to a partially overlapping receptor site with both AaH II and Lqh-alpha-IT. Competitive binding interactions with other scorpion toxins suggest the presence of a putative additional receptor site on sodium channels, which may bind a unique group of these scorpion toxins (Bom III and IV), active on both mammals and insects. We suggest the presence of a cluster of receptor sites for scorpion toxins that inhibit sodium current inactivation, which is very similar on insect and rat brain sodium channels, in spite of the structural and pharmacological differences between them. The sea anemone toxin ATX II is also suggested to bind within this cluster.

7/6/1 (Item 1 from file: 5) 07872222 BIOSIS NO.: 000092131588
ALPHA CONOTOXINS SMALL PEPTIDE PROBES OF NICOTINIC ACETYLCHOLINE RECEPTORS 1991

7/6/2 (Item 2 from file: 155) 08345224 95103030 PMID: 7804605
Calcium channel subtypes in rat brain: biochemical characterization of the high-affinity receptors for omega-conopeptides SNX-230 (synthetic MVIIC), SNX-183 (SVIB), and SNX-111 (MVIIA). Aug 1994

7/6/3 (Item 3 from file: 155) 12598876 21540680 PMID: 11683628
Delta- conotoxin structure/function through a cladistic analysis. Nov 6 2001

7/6/4 (Item 4 from file: 5) 13357882 BIOSIS NO.: 200100565031
delta- Conotoxin structure/function through a cladistic analysis. 2001

7/6/5 (Item 5 from file: 5) 10583622 BIOSIS NO.: 199699204767
Effects of ibogaine and noribogaine on phosphoinositide hydrolysis. 1996

7/6/6 (Item 6 from file: 5) 06280311 BIOSIS NO.: 000086114494
PHYLOGENETIC SPECIFICITY OF CHOLINERGIC LIGANDS ALPHA CONOTOXIN SI 1988

7/6/7 (Item 7 from file: 155) 05978702 89062448 PMID: 3196703
Phylogenetic specificity of cholinergic ligands: alpha- conotoxin SI. Sep 6 1988

7/6/8 (Item 8 from file: 5) 10348684 BIOSIS NO.: 199698803602
Neuroactive peptides of the marine snail, Conus striatus . 1996

7/6/9 (Item 9 from file: 5) 09798202 BIOSIS NO.: 199598253120
Neuroactive peptides of the marine snail, Conus striatus . 1995

7/6/10 (Item 10 from file: 155) 07476923 93003172 PMID: 1390774
Novel alpha- and omega-conotoxins from Conus striatus venom. Oct 20 1992

7/6/11 (Item 11 from file: 5) 08744594 BIOSIS NO.: 199395033945
Novel alpha- and omega-conotoxins from Conus striatus venom. 1992

7/6/12 (Item 12 from file: 155) 08393950 95138099 PMID: 7836370
A new conotoxin affecting sodium current inactivation interacts with the delta- conotoxin receptor site. Jan 20 1995

7/6/13 (Item 13 from file: 5) 09672271 BIOSIS NO.: 199598127189
A new conotoxin affecting sodium current inactivation interacts with the delta- conotoxin receptor site. 1995

7/6/14 (Item 14 from file: 5) 10071539 BIOSIS NO.: 199598526457
A new family of Conus peptides targeted to the nicotinic acetylcholine receptor. 1995

7/6/15 (Item 15 from file: 155) 08004758 94132020 PMID: 8300586
A new neurotoxin receptor site on sodium channels is identified by a conotoxin that affects sodium channel inactivation in molluscs and as an antagonist in rat brain. Jan 28 1994

7/6/16 (Item 16 from file: 5) 09173865 BIOSIS NO.: 199497182235
A New Neurotoxin Receptor Site on Sodium Channels Is Identified by a Conotoxin That Affects Sodium Channel Inactivation in Molluscs and Acts as an Antagonist in Rat Brain. 1994

7/6/17 (Item 17 from file: 155) 10039018 99036623 PMID: 9819194
An O-glycosylated neuroexcitatory conus peptide. Nov 17 1998

7/6/18 (Item 18 from file: 5) 10345420 BIOSIS NO.: 199698800338
Scorpion toxins affecting sodium current inactivation bind to distinct homologous receptor sites on rat brain and insect sodium channels. 1996

7/6/19 (Item 19 from file: 5) 12614201 BIOSIS NO.: 200000367703
Solution structure of alpha- conotoxin SI. 2000

7/7/8 (Item 8 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv.
10348684 BIOSIS NO.: 199698803602
Neuroactive peptides of the marine snail, Conus striatus .
AUTHOR: Cruz L J
AUTHOR ADDRESS: Marine Sci. Inst., Univ. Philippines, Quezon City** Philippines
JOURNAL: Journal of Natural Toxins 5 (1):p122 1996
CONFERENCE/MEETING: 209th American Chemical Society National Meeting on Natural Toxins Anaheim, California, USA April 2, 1995-April 7, 1996 ISSN: 1058-8108 RECORD TYPE: Citation LANGUAGE: English

7/7/9 (Item 9 from file: 5) DIALOG(R)File 5:Biosis Previews(R) (c) 2003 BIOSIS. All rts. reserv.
09798202 BIOSIS NO.: 199598253120
Neuroactive peptides of the marine snail, Conus striatus .
AUTHOR: Cruz L J
AUTHOR ADDRESS: Marine Sci. Inst., Univ. Philippines, Diliman, Quezon City **Philippines
JOURNAL: Abstracts of Papers American Chemical Society 209 (1-2):pAGFD 19 1995
CONFERENCE/MEETING: 209th American Chemical Society National Meeting Anaheim, California, USA April 2-6, 1995
ISSN: 0065-7727 RECORD TYPE: Citation LANGUAGE: English

7/7/17 (Item 17 from file: 155) DIALOG(R)File 155:MEDLINE(R) (c) format only 2003 The Dialog Corp. All rts. reserv.
10039018 99036623 PMID: 9819194
An O-glycosylated neuroexcitatory conus peptide.
Craig A G; Zafaralla G; Cruz L J; Santos A D; Hillyard D R; Dykert J; Rivier J E; Gray W R; Imperial J; DelaCruz R G; Sporning A; Terlau H; West P J; Yoshikami D; Olivera B M
The Clayton Foundation Laboratories for Peptide Biology, The Salk Institute, San Diego, California 92186-5800, USA.
Biochemistry (UNITED STATES) Nov 17 1998, 37 (46) p16019-25, ISSN 0006-2960 Journal Code: 0370623
Contract/Grant No.: GM48677; GM; NIGMS Document type: Journal Article Languages: ENGLISH

Main Citation Owner: NLM Record type: Completed

We purified and characterized a novel peptide from the venom of the fish-hunting cone snail Conus striatus that inhibits voltage-gated K+ channels. The peptide, kappaA- conotoxin SIVA, causes characteristic spastic paralytic symptoms when injected into fish, and in frog nerve-muscle preparations exposed to the toxin, repetitive action potentials are seen in response to a single stimulus applied to the motor nerve. Other electrophysiological tests on diverse preparations provide evidence that is consistent with the peptide blocking K+ channels. The peptide has three disulfide bonds; the locations of Cys residues indicate that the spastic peptide may be the first and defining member of a new family of Conus peptides, the kappaA-conotoxins, which are structurally related to, but pharmacologically distinct from, the alphaA-conotoxins. This 30 AA tricyclic toxin has several characteristics not previously observed in Conus peptides. In addition to the distinctive biological and physiological activity, a novel biochemical feature is the unusually long linear N-terminal tail (11 residues) which contains one O-glycosylated serine at position 7. This is the first evidence for O-glycosylation as a posttranslational modification in a biologically active Conus peptide. Record Date Created: 19981217

FILE 'REGISTRY' ENTERED AT 13:52:29 ON 08 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 American Chemical Society (ACS)

STRUCTURE FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3
DICTIONARY FILE UPDATES: 7 MAR 2003 HIGHEST RN 497212-14-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 20, 2002

L1 3 NCCNGGCSSK/SQSP

FILE 'CA' ENTERED AT 13:53:05 ON 08 MAR 2003
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1907 - 6 Mar 2003 VOL 138 ISS 11
FILE LAST UPDATED: 6 Mar 2003 (20030306/ED)

L2 1 L1

L2 ANSWER 1 OF 1 CA COPYRIGHT 2003 ACS
AN 136:146437 CA
TI New members of the .mu.-conotoxin family for use in the treatment of disease associated with sodium channel function and cDNAs encoding them
IN Olivera, Baldomero M.; McIntosh, J. Michael; Garrett, James E.; Watkins, Maren; Cruz, Lourdes J.; Shon, Ki-Joon; Jacobsen, Richard; Jones, Robert M.; Cartier, G. Edward; Shen, Gregory S.
PA University of Utah Research Foundation, USA; Cognetix, Inc.
SO PCT Int. Appl., 231 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002007678	A2	20020131	WO 2001-US23125	20010723
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2001082945	A5	20020205	AU 2001-82945	20010723
PRAI	US 2000-219619P	P	20000721		
	US 2000-245157P	P	20001103		
	US 2001-264319P	P	20010129		
	US 2001-277270P	P	20010321		
	WO 2001-US23125	W	20010723		

AB The present invention is to .mu.-conopeptides, derivs. or pharmaceutically

acceptable salts thereof. The present invention is further directed to the use of this peptide, derivs. thereof and pharmaceutically acceptable salts thereof for the treatment of disorders assocd. with voltage-gated sodium channels. Thus, the .mu.-conopeptides or derivs. are useful as neuromuscular blocking agents, local anesthetic agents, analgesic agents and neuroprotective agents. The .mu.-conopeptides are also useful for treating neuromuscular disorders. The invention is further directed to nucleic acid sequences encoding the .mu.-conopeptides and encoding propeptides, as well as the propeptides.